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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,028	03/31/2000	Georg Reif	4780-13	1540

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NEW YORK, NY 100368403

EXAMINER

PATTERSON, MARC A

ART UNIT PAPER NUMBER

1772

DATE MAILED: 05/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/540,028

Applicant(s)

REIF ET AL.

Examiner

Marc A Patterson

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 March 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: none.Claim(s) objected to: none.Claim(s) rejected: 20-60,65 and 66.Claim(s) withdrawn from consideration: none.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☒ Other: See attached.

## ADVISORY ACTION

### *Acknowledgement of Applicant's Amendments*

1. The amendment made in Claim 20 in the After Final Amendment filed March 28, 2004 has not been entered because the amendment raises a new issue. The claims prior to amendment were not directed to a plastic coupling layer arranged 'on a surface of the insert,' or a fibers which are 'not embedded in the plastic material' or a coupling layer 'being of a material different from the plastic material' and thermal expansion changes 'through the coupling layer.' The amendment would therefore require further search and consideration to be completely addressed. If the amendment was entered, the amended claim would overcome the prior at currently of record.

### ANSWERS TO APPLICANT'S ARGUMENTS

2. Applicant argues, on page 10 of Paper No. 19, that because the amendment clarifies the change in thermal expansion, the 35 U.S.C. 112 second paragraph rejection of the previous Action, should be withdrawn. However, as stated above, the claims prior to amendment were not directed to thermal expansion changes 'through the coupling layer.' The amendment would therefore require further search and consideration to be completely addressed.

Applicant also argues, on page 11, that one of Applicant's previous argument was taken out of context; the argument was intended to communicate, Applicant states, that Blakeley et al do not disclose an intermediate layer between the insert portion and the composite material.

However, as stated on page 3 of the previous Action, Blakeley et al disclose that the composite material comprises multiple layers of epoxy sheets (column 5, lines 1 – 21); every

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sheet of the composite material is therefore arranged to join the insert to the composite material, and any sheet which is not in direct contact with the insert constitutes an intermediate layer.

Applicant also argues on page 11 that misunderstanding of the claimed invention is clear from the previous Action; it is not a limitation of the claimed invention, Applicant argues, that the intermediate layer is not in contact with the insert; the claim, Applicant states, is not being read in the context of the specification.

However, the phrase ‘any sheet which is not in direct contact with the insert constitutes an intermediate layer,’ as used in the previous Action., is simply intended to state that Blakely et al discloses an intermediate layer between the insert and a plastic material, the material of the insert. Applicant’s statement, that a layer which is in direct contact with the insert is also an intermediate layer, is true, provided that the layer is located between the insert and plastic material.

However, because contact (or non – contact) between the intermediate layer and the insert is not claimed, it is unclear how such contact is relevant to the claimed invention. The invention has thus far been examined in the context of the specification, but if the term ‘intermediate’ is given a broad interpretation, it is certainly not necessary for the intermediate layer taught by Blakely et al to be in contact with the insert.

Applicant also argues, on page 12, that Blakeley et al do not disclose a coupling material that is of a different material than the plastic material, and that the fibers are embedded in the plastic matrix.

However, as stated above, the claims prior to amendment were not directed to a plastic coupling layer arranged ‘on a surface of the insert,’ or a fibers which are ‘not embedded in the

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plastic material' or a coupling layer 'being of a material different from the plastic material' and thermal expansion changes 'through the coupling layer.' The amendment would therefore require further search and consideration to be completely addressed.

Applicant also argues on page 12 that although a desired result regarding equilibration is claimed, the volume fraction of fibers is also claimed, which is a structural limitation, and Blakeley et al makes no mention of this structure.

However, as stated on page 4 of the previous Action, the plastic structural element and insert are thermally compatible (column 3, lines 11 – 14); the coefficient of thermal expansion between the plastic material and the insert are therefore equilibrated, and the volume fraction of the fibers is therefore such that the coefficient of thermal expansion between the plastic material and the insert are equilibrated.

Applicant also argues, on page 13, that Blakeley et al do not disclose an insert portion having an aperture through which reinforcing fibers are looped.

However, as stated on page 12 of the previous Action, the composite material comprises fibers (column 5, lines 1 – 5), and therefore comprises apertures in which the fibers are contained. Furthermore, Blakeley et al teaches that the graphite – epoxy material flows into contact with the entire surface of the insert portion, including the undulations of the insert (column 5, lines 1 – 21), and therefore forms loops; Blakeley et al therefore disclose an insert portion having an aperture, through which reinforcing fibers are looped.

Applicant also argues on page 13 that Blakeley et al do not disclose a coupling material that is of a different material than the plastic material, and that the fibers are embedded in the plastic matrix.

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However, as stated above, the claims prior to amendment were not directed to a plastic coupling layer arranged 'on a surface of the insert,' or a fibers which are 'not embedded in the plastic material' or a coupling layer 'being of a material different from the plastic material' and thermal expansion changes 'through the coupling layer.' The amendment would therefore require further search and consideration to be completely addressed.

### *Conclusion*

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (571) 272 - 1497. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571) 272 - 1498. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

*Marc Patterson*

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*Harold Pyon*  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

*5/3/04*